
Parcel Map Conversion
Specifications
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Introduction

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Why convert?

- Faster access to data & information
- Improved data analysis capabilities
- Facilitates the integration of data from multiple sources
- High quality cartographic output
- Excellent data management
- Better decision making

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Important Definitions

1.) Straight Conversion
2.) Conversion (w/geo-referencing)
3.) Re-Compilation
4.) Re-Mapping

Which is the right approach for a community?

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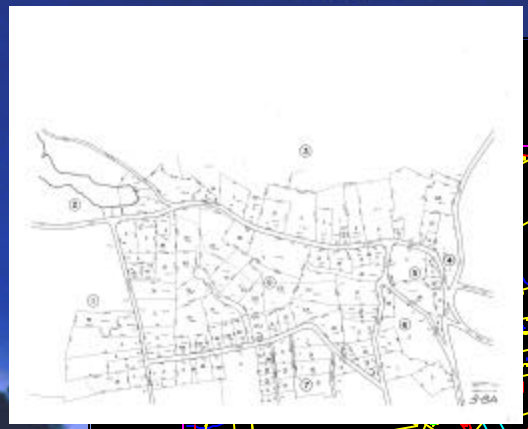
Straight Conversion

Going completely from a manually based media to a digital one, or going from one digital format to another. The result of this process usually exactly mirror the original, and the paper and mylar deliverables from conversion process closely match the original product used by the municipality.

This conversion process does not typically modify the line work displayed on the original manuscripts, but usually will improve the consistency and display of textual information.

The ideal straight conversion situation are maps that have been build on a outstanding base with a defined coordinate system.



These ideal maps can be put together easily to ultimately create a Parcel based GIS for a community.

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Conversion (w/ Geo-Referencing)

This conversion practice transforms existing map(s), built on a known or unknown geographic foundation to fit a new, known geographic foundation, such as MassGIS Orthophotoquads. Practices such as best fitting and rubber sheeting are typically used in this conversion process.

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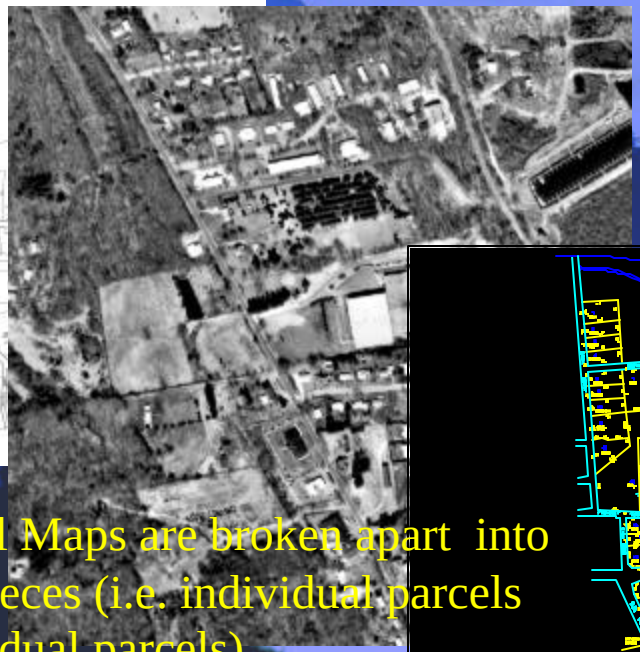
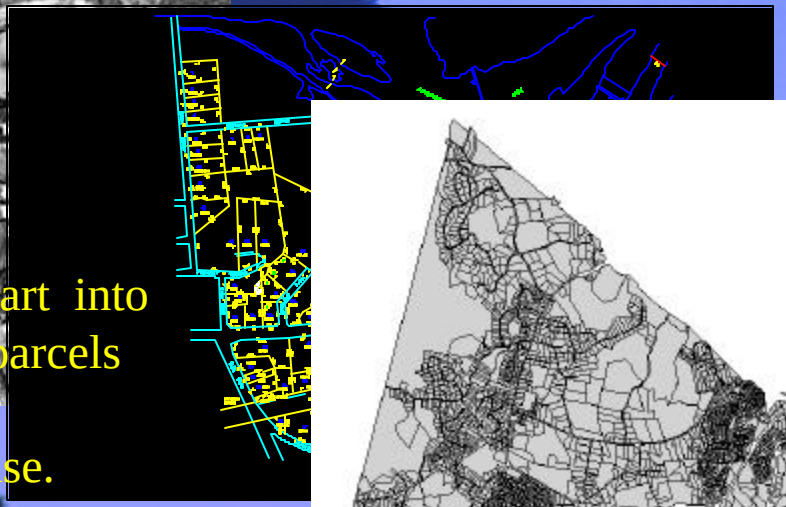
Re-Compilation





1. The original Parcel Maps are broken apart into their constituent pieces (i.e. individual parcels or groups of individual parcels).
2. These pieces are reconciled to a new base.
3. New parcel maps are created, and
4. A new digital composite prepared.

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Re-Mapping

- Obtain a new base map
- Deed and Plan Research
- New maps are prepared based on this research, and
- The community receives new digital parcel mapping.

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The Four "Knows"

Parcel Conversion Specifications that are right for a community will largely depend on…

- **Knowing** what you have…
- **Knowing** what you need (and want)…
- **Knowing** how to ask for what you need (and evaluating what you receive)…
- **Knowing** how you are going to apply and use what you receive for deliverables…

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Know what you have…

Have a complete knowledge of the maps to be converted. Do some research.

- How were the maps originally developed?
- Were they developed on a sound base map?
- How well have the maps been maintained?
- What is your perception of the accuracy?
- What are some of the known problems with the maps?
- Have you evaluated the accuracy of the maps?
- What information displayed on the maps are important to the Town? To the Assessor? To the public?
- How many total parcels? How many map sheets? At what scales?

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Know what you need…

Now that you know what you have, identify what you need:

- Is this conversion being driven by a single department, multiple departments, or a GIS Committee? Are the right people aware and have had the opportunity to provide input?
- What do you need for products resulting from the conversion?
- Do you need GIS or CADD data? If so, how will these new products effect the current way business is performed? What products do you require in order to meet the needs of all current end-users of the maps?
- What software, if any, is needed?
- Is this conversion the first step in a bigger picture?
- Is the conversion migration path thoroughly defined?

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Know how to ask for what you need…

Now that you know what you have and need, create an RFP (or plan) that correctly describes them.

- Create a plan that details the current state of the maps to be converted. Describe their development and update history. Detail all relevant statistics such as the number of parcels, number of map sheets, and various mapping scales used. Hold a (pre-proposal) meeting to discuss the project and any known problems with the current mapping.
- For your scope of activities, detail specifically what deliverables will be required. If this is an RFP, this effort will help keep the playing field level, and simplify the ability to evaluate the responding proposals.
- In preparation for creating an RFP, request from several consultants example RFPs you can use. Have an experienced third party review the RFP to ensure the plan makes sense.
- If you feel like this effort is beyond your ability, don't hesitate ask an expert consultant for help.

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Know how you are going to use what you receive as deliverables…

Once the conversion process is completed…

- How will the digital data and other requested deliverables be distributed and used throughout the municipal office or offices?
- Will GIS software be required? If so, who will need it? Do they need training? Will assistance be required to install the software and data resources?
- Has the mission been accomplished, or are there other steps necessary to make the conversion project complete? What's next?
- How will the data be maintained and updated? How will be responsible for this process?

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Conversion Specs (Suggestions)

Request that the conversion process capture important layering characteristics (i.e. road right-of-ways, easements, parcels lines, common ownership lines, water features that form parcel boundaries, etc.) This approach will ensure the ability to display information (paper and digital) in a format similar to the original manuscripts.

Request that the vendor supply a detailed outline of the GIS coverages that will be created as a result of the conversion process, and a description of attributes to be captured or have these defined beforehand.

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Conversion Specs (Suggestions)

Shoot for the complete conversion of the parcel maps – line work and text. If the budget won't support both, then make sure that a plan is in place to phase in the missing components in a timely fashion. Why? You don't want to end up with two products to update and two products that take a divergent update path..

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Conversion Specs (Suggestions)

Pursue GIS deliverables, and request that these deliverables be compatible with other available resources. Generally, most vendors will recommend that deliverables be provided in ESRI Arc/Info format.

But…

Keep your options open to other GIS formats that may better serve some of your specific display requirements or formatting needs..

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Conversion Specs (Suggestions)

Develop a seamless GIS composite that supports all GIS needs, as well as, hard copy reproduction needs. This approach will prevent redundant updating, minimize human error, and streamline the map maintenance process. This approach also enhances the longevity of the GIS conversion investment.

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Conversion Specs (Suggestions)

Be an integral part of the quality control process. Establish milestones for review. If possible, and if the budget will support it, have a small pilot project performed. This will give you the opportunity to review and comment on the final deliverables before they are developed.

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Conversion Specs (Suggestions)

Request that the conversion of text be based on excepted drafting standards (i.e. Leroy). Also request that the GIS formatting of the data be consistent with their intended uses uses and output requirements. Once again, the goal is to develop a GIS with a long and value-added life span.

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